

**APPENDIX B**

**Checklist For Field Sampling and Analysis Plan**

## Site-Specific Investigation-Derived Waste Plan Checklist

This checklist supplements the Master IDW Plan with site-specific information. Once completed for a specific project, it provides necessary IDW information for each investigation. It is to be taken into the field with the Master IDW Plan.

Site: AFWTF

1. IDW Media: ☒ Soil cuttings  
☒ Well development or purge water  
☒ Decontamination residual soil and wastewater  
☒ PPE or disposable equipment  
☐ Other \_\_\_\_\_
2. Expected Regulatory Status: ☐ Hazardous  
☐ Solid Waste  
☒ Unknown  
☒ Other Waste management activities regulated by OSHA  
Hazardous waste standard (1910.120)
3. Site Location: Decontamination fluids and PPE will be generated at all SWMUs.
4. Nature of Contaminants Expected: ☒ Petroleum contamination  
☒ Polyaromatic hydrocarbon  
☒ Pesticides  
☒ Herbicides  
☒ PCBs  
☒ Metals  
☒ Other - Contaminant concentrations  
from previous analytical results were very low for  
all of the above.
5. Volume of IDW Expected: ☒ Drums - Maximum of 6. One for decontamination  
Fluids, four for drilling cuttings and one for PPE  
and other disposable items.  
☐ Cubic Yards  
☐ Tons  
☐ Gallons

6. Compositing Strategy for Sample Collection: No IDW sampling planned. Will base disposal decisions on analytical results from sampling.
7. IDW Storage  
X\_\_\_\_\_ As per Master IDW Plan \_\_\_\_\_ Other \_\_\_\_\_
8. Waste Disposal  
X\_\_\_\_\_ As per Master IDW Plan \_\_\_\_\_ Other \_\_\_\_\_

## Site-Specific Quality Assurance Project Plan Checklist

This checklist supplements the Master QAPP with site-specific information. Once completed for a specific project, it provides necessary quality assurance information for each investigation. It is to be taken into the field with the Master QAPP.

Site: AFWTF

1. List sampling tasks: groundwater and subsurface soil sampling, surface soil sampling, and monitoring well installations.
2. List data quality objectives: The objective of the SWMU Investigation is to determine the need for further action at each of the SWMUs. Previous analytical data and the analytical data generated from the Investigation will be reviewed and a recommendation for no further action or additional investigation will be made based on the data.
3. Organization:

LANTDIV Navy Technical Representative	Chris Penny / LANTDIV
PREQB Federal Facilities Project Manager	Aissa Colon/ PREQB
CH2M HILL Activity Manager	John Tomik / CH2M HILL
Quality Control Senior Review	Kevin Sanders / CH2M HILL
Technical Project Manager	Marty Clasen/ CH2M HILL
Field Team Leader	Erik Isern/ CH2M HILL
4. Table of samples with analyses to be performed and associated QC samples included in the SWMU Investigation Work Plan.
5. Analytical Quantitation Limits:  
X\_\_\_\_ As per Master QAPP  
\_\_\_\_ Other
6. QA/QC Acceptance Criteria (e.g., precision, accuracy)  
X\_\_\_\_ As per Master QAPP      \_\_\_\_ Other (attached)
7. Data reduction, validation, and reporting:  
X\_\_\_\_ As per Master QAPP      \_\_\_\_ Other (attached)
8. Internal QC Procedures (field and laboratory):

X\_\_\_\_\_As per Master QAPP                      \_\_\_\_\_Other (attached)

9.      Corrective Action:

X\_\_\_\_\_As per Master QAPP                      \_\_\_\_\_Other (attached)

10.     Other deviations from Master QAPP - None

## Site-Specific Field Sampling Plan Checklist

This checklist supplements the Master Field Sampling Plan with site-specific information. Once completed for a specific project, it provides necessary field sampling information for each investigation. It is to be taken into the field with the Master FSP.

Site: AFWTF

1. Tasks to be performed:

- |   |   |
|---|---|
| X___ Geophysical surveys                          | X___ In-situ groundwater sampling         |
| ___ Soil gas surveys                              | ___ Aquifer testing                       |
| X___ Surface water and sediment sampling          | X___ Hydrogeologic measurements           |
| X___ Surface soil sampling                        | ___ Biota sampling                        |
| X___ Soil boring installation                     | ___ Trenching                             |
| X___ Subsurface soil sampling                     | ___ Land surveying                        |
| X___ Monitoring well installation and development | X___ Investigation derived waste sampling |
| ___ Monitoring well abandonment                   | X___ Decontamination                      |
| X___ Groundwater sampling                         | ___ Other _____                           |

2. Field measurements to be taken:

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| X___ temperature                    | X___ surveying                  |
| X___ pH                             | X___ magnetometry               |
| ___ dissolved oxygen                | X___ global positioning system  |
| X___ turbidity                      | ___ soil gas parameters (list): |
| X___ specific conductance           | ___ combustible gases           |
| X___ organic vapor monitoring       | X___ water-level measurements   |
| X___ geophysical parameters (list): | ___ pumping rate                |
| X___ electromagnetic induction      | ___ other _____                 |
| ___ ground-penetrating radar        |                                 |

3. Sampling program (nomenclature, etc.):

- X\_\_\_ As per Master FSP      \_\_\_ Other

4. Map of boring and sampling locations (attach to checklist): See Work Plan.

5. Table of field samples to be collected: See Investigation Work Plan.

6. Applicable SOPs or references to specific pages in Master FSP: The following SOPs from Volume 2 of the Master Project Plans are to be implemented.

- Geoprobe Soil Sample Collection
- Shallow Soil Sampling
- Monitoring Well Installation
- Homogenization of Soil and Sediment Samples

- VOC Sampling – Water
- Field Filtering
- Chain-of-Custody
- Packaging and Shipping Procedures
- Field Rinse Blank Preparation
- Decontamination of Personnel and Equipment
- Disposal of Fluids and Solids

7. Site-specific procedures or updates to protocols established in the Master FSP:  
Described in the Work Plan.

## Site-Specific Health and Safety Plan

This checklist must be used in conjunction with the Master HASP. This checklist is intended for use by CH2M HILL employees only. All CH2M HILL employees performing tasks under this checklist must read and sign both this checklist and the Master HASP and agree to abide by their provisions (see EMPLOYEE SIGNOFF attached to the checklist).

Site: AFWTF

Location(s): SWMU Location Map and Individual SWMU figures are included in the Work Plan.

This document shall be maintained on site with the Master Health and Safety Plan. It will include as attachments from the Work Plan a site map and the site characterization and objectives for this site.

The procedures described in the Master Health and Safety Plan will be followed unless otherwise specified in this Site-Specific Health and Safety Plan.

### 1. HAZWOPER-Regulated Tasks

- |  |  |
|--|--|
| <input type="checkbox"/> Test pit and excavation                             | <input checked="" type="checkbox"/> Groundwater sampling                                     |
| <input checked="" type="checkbox"/> Soil boring installation                 | <input type="checkbox"/> Aquifer testing   |
| <input checked="" type="checkbox"/> Geoprobe boring                          | <input checked="" type="checkbox"/> Hydrologic measurements                                  |
| <input checked="" type="checkbox"/> Geophysical surveys                      | <input checked="" type="checkbox"/> Surface water sampling                                   |
| <input type="checkbox"/> Hand augering                                       | <input type="checkbox"/> Biota sampling  |
| <input checked="" type="checkbox"/> Subsurface soil sampling                 | <input checked="" type="checkbox"/> Investigation-derived waste (drum) sampling and disposal |
| <input checked="" type="checkbox"/> Surface soil sampling                    | <input type="checkbox"/> Observation of loading of material for offsite disposal             |
| <input type="checkbox"/> Soil gas surveys                                    | <input type="checkbox"/> Oversight of remediation and construction                           |
| <input checked="" type="checkbox"/> Sediment sampling                        | <input type="checkbox"/> Other _____   |
| <input checked="" type="checkbox"/> Monitoring well/drive point installation |  |
| <input type="checkbox"/> Monitoring well abandonment                         |  |

### 2. Hazards of Concern: (Check as many as are applicable. Refer to Section 3 of Master H&S Plan for control measures):

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Heat stress                 | <input type="checkbox"/> Confined space entry              |
| <input type="checkbox"/> Cold stress                            | <input type="checkbox"/> Trenches, excavations             |
| <input type="checkbox"/> Buried utilities, drums, tanks         | <input type="checkbox"/> Protruding objects                |
| <input type="checkbox"/> Inadequate illumination                | <input checked="" type="checkbox"/> Vehicle traffic        |
| <input checked="" type="checkbox"/> Drilling                    | <input type="checkbox"/> Ladders, scaffolds                |
| <input type="checkbox"/> Heavy equipment                        | <input type="checkbox"/> Fire                              |
| <input type="checkbox"/> Working near water                     | <input type="checkbox"/> Working on water                  |
| <input type="checkbox"/> Flying debris                          | <input type="checkbox"/> Snakes or insects                 |
| <input type="checkbox"/> Gas cylinders                          | <input checked="" type="checkbox"/> Poison ivy, oak, sumac |
| <input checked="" type="checkbox"/> Noise                       | <input checked="" type="checkbox"/> Ticks                  |
| <input checked="" type="checkbox"/> Slip, trip, or fall hazards | <input type="checkbox"/> Radiological                      |
| <input checked="" type="checkbox"/> Back injury                 | <input type="checkbox"/> Other _____                       |

3. Contaminants of Concern (List if known. Refer to Table 3.8 of the Master HASP contaminant-specific information)

<u>PCBs</u>	<u>Metals</u>	<u>VOCs</u>
<u>PNAs</u>	<u>SVOCs</u>	

4. Personnel (List CH2M HILL field team members :

Field team leader(s)	Erik Isern
Site safety coordinator(s)	Erik Isern
Field team members	Karen Karvazy, Emiliano Cabale, Hector Hernandez, Gabe Silva, Katie Swanson, Rick Gorsira

5. Contractors/Subcontractors

X ☐ Procedures as per Master HASP

X ☐ Other

Name: To be added \_\_\_\_\_

Contact: To be added \_\_\_\_\_

Telephone: To be added \_\_\_\_\_

6. Level of personal protective equipment (PPE) required: D  
Refer to Table 5.1 of Master HASP, CH2M HILL SOPs HS-07 and HS-08, and Respiratory Protection, Section 2 of the Site Safety Notebook.

7. Air monitoring instruments to be used (refer to Master HSP for action levels):

X <input type="checkbox"/> OVM 10.6	<input type="checkbox"/> FID
<input type="checkbox"/> CGI	<input type="checkbox"/> Dust monitor
<input type="checkbox"/> O <sub>2</sub>	

8. Decontamination procedures:

☐ As per Section 7 of Master HASP

X ☐ Other As described in the SWMU Investigation Work Plan.

9. List any other deviations or variations from the Master HASP: None
10. Emergency Response (Check that all names and numbers are correct on page 47 of Master HASP and attach corrected page to this checklist)
11. Map to hospital (Highlight route to hospital from site and attach to this checklist)
12. Emergency Contacts (Check that all names and numbers are correct on page 49 of Master HASP and attach corrected page to this checklist)
13. Approval. This prepared site-specific checklist must be approved by John Longo/NJO or Laura Johnson/NJO or their authorized representative  
Name \_\_\_\_\_ Title: Health and Safety Manager Date: \_\_\_\_\_  
  
(Signature will be included in the Final HASP)
14. Employee Signoff. All CH2M HILL employees working at the site must sign the attached Employee Signoff for the checklist as well as for the Master HASP.

\_\_\_\_\_ Site

<b>HASP Checklist Employee Signoff</b>
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The employees listed below have been given a copy of both this health and safety plan checklist and the Master HSP, have read and understood them, and agree to abide by their provisions.

EMPLOYEE NAME	EMPLOYEE SIGNATURE AND DATE